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CLINICAL OUTCOMES OF RETROPERITONEAL HEMORRHAGE AFTER PERCUTANEOUS CORONARY INTERVENTION IN THE CURRENT PRACTICE ERA

i2 Poster Contributions
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Background Retroperitoneal hemorrhage (RPH) is a serious but rare complication of percutaneous coronary intervention (PCI). This study aimed to describe the clinical outcomes of patients (pts) who developed RPH after PCI, with focus on treatment and the value of abdominal/pelvic computed(CT).

Methods Among 20,904 pts undergoing PCI, we identified 93 RPH (0.45%) confirmed by CT or surgical findings. We identified 3 groups: pts on refractory shock (systolic pressure <80 mm Hg ≥30 min despite fluids/vasopressors, n=16 [17.2%]); pts with transient hypotension (<30 min, n=34 [36.6%]); pts without hypotension (n=43 [46.2%]). The primary endpoint was the composite of in-hospital death-myocardial infarction-stroke (MACE).

Results Baseline characteristics were similar among the 3 groups. (Table 1) Pts on refractory shock had more bleeding quantified by CT (p<0.001), more red blood cell (RBC) transfusion (p<0.001) and were treated invasively more often (68.7%). MACE trended higher in pts presenting with refractory shock, however this difference was not significant. The volume of bleeding by CT and timing of imaging diagnosis did not correlate with MACE. RBC transfusion, but not clopidogrel cessation, was associated with MACE.

Conclusions RPH remains as a serious complication of PCI and is associated with high rates of morbi-mortality independently of the therapeutic strategy. In pts who were hemodynamically stable, RPH volume as quantified by abdominal/pelvic CT did not contribute to prognosis.

Table 1. Baseline clinical characteristics

	General population	Hemodynamic status			
	(n=93)	No hypotension (n=43)	Transit hypotension (n=34)	Refractory shock (n=16)	p value
Clinical characteristics					
Age, years ± SD	65.9 ± 14.8	67.0 ± 12.2	63.0 ± 17.6	69.1 ± 14.7	0.3
Men	35 (37.6%)	16 (37.2%)	14 (41.2%)	5 (31.3%)	0.8
Diabetes	23 (24.7%)	13 (30.2%)	8 (23.5%)	2 (12.5%)	0.4
History of prior PCI	25 (29.1%)	15 (39.5%)	5 (15.2%)	5 (33.3%)	0.07
History of prior CABG	18 (19.8%)	10 (24.4%)	4 (11.4%)	4 (26.7%)	0.3
LV ejection fraction, % ± SD	46 ± 15	44 ± 15	47 ± 15	52 ± 11	0.3
Laboratory characteristics					
Baseline hematocrit, % ± SD	36.6 ± 6.3	35.8 ± 6.9	38.1 ± 5.0	35.5 ± 6.4	0.2
Nadir hematocrit, % ± SD	25.1 ± 5.7	25.6 ± 5.6	25.8 ± 5.3	21.9 ± 6.3	0.06
Baseline creatinine, mg/dl ± SD	1.41 ± 1.50	1.60 ± 1.75	1.36 ± 1.49	1.00 ± 0.32	0.4
Indication for PCI					
Acute MI	30 (32.3%)	11 (25.6%)	17 (48.6%)	2 (13.3%)	0.02
Unstable angina	38 (40.9%)	19 (44.2%)	10 (28.6%)	9 (60.0%)	0.1
Cardiogenic shock	3 (3.3%)	0	3 (8.6%)	0	0.1